

CLAIMS

1. Inoculating alloy for cast iron containing (by weight) 0.005 to 3% of an element in the bismuth, lead and antimony group, 0.3 to 10% of metals in the group consisting of rare earths and possibly up to 5% of aluminium and up to 1.5% of calcium, the remainder being ferro-silicon, characterised in that lanthanum accounts for more than 90% of the rare earth metals used in its composition.

2. Alloy according to claim 1, characterised in that it contains from 0.3 to 8% of lanthanum and from 0.2 to 1.5% of bismuth.

3. Alloy according to one of claims 1 or 2, characterised in that it contains between 0.7 and 1.3% of bismuth.

4. Alloy according to one of claims 1 to 3, characterised in that it contains between 0.5 and 5% of lanthanum.

5. Alloy according to one of claims 1 to 4, characterised in that it contains between 0.8 and 5% of aluminium.

6. Alloy according to claim 5, characterised in that it contains between 1 and 3.5% of aluminium.

7. Alloy according to one of claims 1 to 6, characterised in that it is conditioned in the form of a powder.

8. Alloy according to one of claims 1 to 6, characterised in that it is conditioned in the form of slugs for treatment "in the mould".

9. Alloy according to claim 8, characterised in
5 that the slug is obtained by moulding from molten alloy.

10. Alloy according to claim 8, characterised in that the slug is obtained by agglomeration of a powder.

11. Alloy according to claim 10, characterised in that the powder grain size is smaller than 1 mm, with the
10 size grading fraction between 50 and 250 μm accounting for more than 35% of the total weight, and the fraction smaller than 50 μm representing less than 25%.

12. Alloy according to one of claims 10 or 11, characterised in that the average composition of the
15 alloy is obtained by a mix of alloy powders with different compositions.